

Amendment

In the Claims

1. (previously presented) A vaccine composition for inducing an immune response to a pathogen comprising a nucleic acid encoding an antigen eliciting an immune response to the pathogen encapsulated in a mucoadhesive controlled release particulate formulation comprising an open-celled polymeric foam of approximately 95% void volume, or particles thereof.

2. (canceled)

3. (previously presented) The composition of claim 1 further comprising a mucoadhesive polymer coating.

4. (original) The composition of claim 1 further comprising an enteric outer coating or capsule.

5. (original) The composition of claim 1 having a particulate diameter of less than five microns.

6. (previously presented) The composition of claim 1 formed by lyophilizing a solution of a biodegradable polymer to form an open-celled polymeric foam of approximately 95% void volume,

impregnating the foam with an aqueous solution of the nucleic acid,

lyophilizing the foam to remove the water, and

extruding the resulting matrix at ultrahigh pressures.

AMENDMENT AND RESPONSE TO OFFICE ACTION

7. (previously presented) The composition of claim 1 wherein the method further comprises cryogenically grinding the matrix to an average particle size of fifteen microns in diameter; and sieving to isolate particles less than five microns in diameter.

8. (original) The composition of claim 1 wherein the polymer is a low molecular weight poly(D,L-lactide-co-glycolide).

9. (currently amended) The composition of claim 1 wherein the pathogen is selected from the group consisting of ~~malaria~~ *Plasmodium falciparum*, ~~tularemia~~ *Francisella tularensis*, ~~anthrax~~ *Bacillus anthracis*, and *Helicobacter pylori*.

10. (original) The composition of claim 1 further comprising providing an adjuvant with the antigen.

11. (original) The composition of claim 1 wherein the antigen is expressed or released for a period of weeks to months.

12-21. (canceled)